

Department of Transportation—Federal Aviation Administration

Supplemental Type Certificate

Number SA00506SE

This certificate, issued to: **Buzz Ruchert**
Buzz Ruchert Flying Service
P.O. Box 640
Pomeroy, WA 99347

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part 8 of the Civil Air Regulations. (CAR 8) effective October 11, 1950, as stated in the original product Type Certificate.

<i>Original Product—Type Certificate Number</i>	1A16
<i>Make:</i>	AG CAT Corporation
<i>Model:</i>	G-164B Restricted Category

Description of the Type Design Change: Install an Allied Signal TPE331-1-151G turboprop engine and a Hartzell HC-B3TN-5E/T10282+4 propeller in accordance with Buzz Ruchert Flying Service photographs number 1 through 17.

NOTE: Allied Signal TPE331-1-151G must have STC SE8028SW installed.

Limitations and Conditions: Data pertaining to this modification are considered inadequate for duplication in other aircraft. Therefore, this approval is limited to the installation in AG-CAT Corporation G-164B, Restricted Category aircraft, Serial Number 836B, R/N N800SC. A copy of this Certificate and Airplane Flight Manual Supplement, dated April 2, 1998, must be maintained as part of the permanent records for the modified aircraft.

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This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: February 4, 1998

Date reissued:

Date of issuance April 2, 1998

Date amended:



By direction of the Administrator

 (Signature)

Acting Manager, Seattle Aircraft
 Certification Office

(Title)

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

This certificate may be transferred in accordance with FAR 21.47.

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Supplemental Type Certificate**(Continuation Sheet)***Number* **SA00506SE***Limitations and Conditions continued:*

AG-CAT Corporation G164B, Restricted Category, S/N 836B as modified by this STC.

Engine	Allied Signal TPE331-1-151G	
Fuel	Aviation turbine fuels ASTM designation D1655-64T, Types Jet A, A-1, and B; and with military aviation turbine fuel MIL-T-5624G, Grades JP-4 and JP-5; and with military aircraft fuel MIL-F-5616-1, Grade JP-1. Consult Garrett Report PE-5064-R.	
Fuel Additives	Fuel not containing anti-icing fuel additives may be fortified with MIL-I-27686D Fuel System Icing Inhibitor, or an equivalent, but not in excess of 0.1 percent by volume.	
Oil	Oil types conforming to MIL-L-23699 and MIL-L-7808.	
	See Garrett Specification EMS 53110	
Engine Ratings	Takeoff (5 minutes)	575 HP
	Maximum Continuous	575 HP
Engine Limits	Output Shaft Speed	2000 RPM
	Transient Overspeed (5 secs.)	2100 RPM
	Transient Overspeed (5 mins.)	2020 RPM
Torque	Takeoff (5 mins.)	1510 Ft. Lbs.
	Maximum Continuous	1510 Ft. Lbs.
Exhaust Gas Temperature	Takeoff (5 mins.)	578° C
	Maximum Continuous	556° C
	Starting (1 sec.)	815° C
Oil Pressure	Takeoff and Maximum Continuous	70 to 120 psig
Oil Temperature	Type II	-40° C to 127° C
	Type I	-40° C to 93° C
Propeller	Hartzell HC-B3TN-5E/T10282+4 Minimum length 101 inches diameter Maximum length 106 inches diameter Flight Idle blade angle 7.5°	

- END -*Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.*